REMARKS

Claims 1-15 are all the claims pending in the Application. By this Amendment,

Applicant amends claims 2, 3, 5, and 6. Claims 2, 3, 5, and 6 have been amended solely for the

purpose of improved readability and clarity. Since such amendments are made to correct minor,

basic elements, Applicant submits that that they do not narrow the scope of the claim and do not

raise any Festo implications.

I.   Preliminary Matter

As a preliminary matter, Applicant thanks the Examiner for initialing the reference listed

on Form PTO/SB/08 A & B submitted with the Information Disclosure Statement filed on

August 21, 2003.

II.   Summary of the Office Action

The Examiner now rejects claims 2-8 under 35 U.S.C. § 112, second paragraph. In

addition, the Examiner withdrew the indication that claim 2 contains allowable subject matter

and issued an Official Notice that claim 2 is obvious over Hansen. In addition, the Examiner

rejected claims 9, 10, and 12-15 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent

No. 5, 819, 042 to Hansen (hereinafter "Hansen"), claims 1-6 and 11 under 35 U.S.C. § 103(a) as

being obvious over Hansen, and claims 7 and 8 under 35 U.S.C. § 103(a) as being obvious over

Hansen in view of Applicant's Admitted Prior Art (APA).

III.   Claim Rejections under 35 U.S.C. § 112

Claims 2-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. In particular, the Examiner alleges that in claims 2, 3, 5, and 6, there is

insufficient antecedent basis for the recitation *"created by said device selecting means."* That is,

means for selecting only recites the function of selecting a device of the controller (see page 2 of

the Office Action).

Applicant has revised the claims by amending claims 2, 3, 5, and 6, and respectfully

submits that the claims as now presented no longer include the potential informalities mentioned

by the Examiner. Applicant therefore respectfully requests the Examiner to withdraw this

rejection of claims 2-8.

IV.   Claim Rejections under 35 U.S.C. § 102

Claims 9, 10, and 12-15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by

Hansen. The Examiner's careful reconsideration is submitted to be appropriate in view of the

following comments traversing the rejection.

To be an "anticipation" rejection under 35 U.S.C. § 102, the reference must teach <u>every</u>

<u>element and recitation of the Applicant's claims</u>. Rejections under 35 U.S.C. § 102 are proper

only when the claimed subject matter is identically disclosed or described in the prior art. Thus,

the reference must <u>clearly and unequivocally disclose every element and recitation of the</u>

<u>claimed invention</u>.

Of the rejected claims, only claim 9 is independent. Hansen fails to teach or suggest the

unique combination of features recited in claim 9. Claim 9 recites: "selecting a device of a

controller; and setting up a display drafting information for said selected device after said device

is selected." The Examiner alleges that Hansen's network devices are equivalent to a device of

the controller and that Hansen's configuration of the selected device is equivalent to selecting the

device before setting up a display drafting information (see page 3 of the Office Action). This

ground of rejection is respectfully submitted to be incorrect as a technical matter. Hansen's

discussion of selecting a device and configuring the device has been carefully studied and such

teachings of Hansen are very dissimilar to selecting a device of a controller and setting up the

display drafting information, as set forth in claim 9.

For example, an illustrative, non-limiting embodiment of the present invention, teaches a

display for indicating the operated condition of a controller which coordinates and controls the

operation of a controlled system such as the industrial equipment, the production line or the

chemical plant. In other words, in this exemplary embodiment a display for drafting information

(operational conditions) for the device such as signals and data of the controlled system is set up.

This passage is provided by way of an example only and is not intended to limit the scope of the

claims in any way.

Hansen teaches an application for configuring a network. In Hansen, the user can add a

device to the configuration map by selecting an icon for the type of the device and then

specifying the name for the device. Next, the device could be connected to other devices and a

configuration file for the device may be created and uploaded to the device (Fig. 3B) Hansen's

network devices are nothing more than visual displays, computer systems, routers, and office

workstations (col. 1, lines 31 to 50).

The relevance of Hansen is not understood, as it relates to configuring a network device.

Hansen is from a different field of endeavor and addresses a completely different problem.

Hansen has nothing to do with operated conditions of a controller, which coordinates and

controls the operation of the controlled system. In fact, Hansen does not teach or suggest a

device of the controller. That is, Hansen fails to even mention a controller. Indeed, Hansen is

not even remotely related to the programmable controller. In Hansen, there is no controller.

Moreover, Hansen teaches that the device window 104 includes icons representative of a

PPP link, a vendor specific modular router, an ISDN-type WAN, an Ethernet-type LAN, a non-

vendor specific computer subsystem, an X.25-type packet-switching WAN, and an ISDN-type

WAN which subscribes to frame relay-mode service. In other words, in Hansen, the device is a

router or a computer subsystem. Clearly, a router or a computer subsystem cannot be equated

with the devices of a controller such as input signal, output signal, a count value, a timer value,

numerical data, etc. In Hansen, the network devices are not signals and/or data. Hansen clearly

fails to teach or suggest a device of the controller within the meaning of claim 9.

Finally, the Examiner alleges that Hansen's teachings of configuring a device is

equivalent to setting up the display drafting information for the device (see page 3 of the Office

Action). In Hansen, however, the administrator selects a device type (by selecting an icon from

the window 102) and provides a device name. When the device is selected, however, only a

configuration file for the device is created and uploaded to the device. In Hansen, there is no

setting up of a display drafting information once the device is selected.

The Examiner alleges that Hansen's steps 96-99 in Fig. 3B are equivalent to setting up a

display drafting information for the selected device. In Hansen, at step 96, the network

administrator decides whether to upload the configuration file to the device. If upload is

selected, the method proceeds to step 97 where the constructed configuration file is uploaded to

the network device 26. After completing the upload of the configuration file at step 97, or if the

network administrator decided at step 96 not to upload the configuration file, the method

10

proceeds to step 98 where the network administrator decides whether to perform subsequent

configuration on a device on the network configuration map 106. If subsequent configuration of

a device is selected, the method proceeds to step 99 where subsequent configuration of a selected

device is performed from a backplane bitmap of the selected device. To select a device for

subsequent configuration, the network administrator clicks on a configured device included in

the network configuration map 106. By doing so, a bitmap of the backplane (*e.g.*, Fig. 6) of the

selected configured device is displayed (Fig 3B; col. 14, line 58 to col. 15, line 31).

As detailed above, Hansen teaches configuring or creating a configuration file for the

selected device. A configuration file contains information for organizing and interconnecting the

device to perform desired tasks. In other words, the configuration as taught by Hansen deals

with setting up the device to perform the desired tasks and not to a display drafting information.

Hansen only teaches selecting an icon for the device type and inputting the device name. The

device type and the device name is used to identify a device but once the device is selected there

is no setting up of the display drafting information. In short, Hansen fails to unequivocally

disclose setting up a display drafting information for the selected device after the device is

selected within the meaning of claim 9.

Therefore, the unique combination of features set forth in claim 9 is not taught by

Hansen, which lacks having a device of a controller and setting up a display drafting

information for said selected device after said device is selected. For at least these exemplary

reasons, independent claim 9 is patentably distinguishable (and patentable over) Hansen. It is,

therefore, appropriate and necessary for the Examiner to withdraw this rejection of independent

claim 9. Claims 10 and 12-15 are allowable at least by virtue of their dependency on claim 9.

Moreover, with respect to the dependent claims 13 and 14, the Examiner alleges that

"whenever Hansen's system saves data such as display drafting information or device selection

information, the process of setting up a display drafting information and selecting device of the

controller must be paused (or interrupted) for a period of time to allow the data to be saved

completely before they can continue" (page 3 of the Office Action). This is incorrect as a

technical matter. In Hansen, all of the operations are performed using commands selected from a

menu. Commands could be "edit", "open" and so on. Hansen teaches that when a command is

selected, it is executed and then, the next command may be selected (Fig. 3A; col. 9, line 53 to

col. 11, line 15). Hansen does not teach or suggest performing the save command in the middle

of the configuration. Moreover, a device is selected via a drag and drop approach. Clearly, until

the device is selected by dropping it in the window 102, it cannot be saved. For at least these

additional reasons, it is appropriate and necessary for the Examiner to withdraw this rejection of

claims 13 and 14.

Finally, dependent claim 15 recites "said selected device is used in display drafting and in

generating a control program for said controller." The Examiner alleges that Hansen's Fig 4, col.

9, lines 40 to 52 disclose the recitation of claim 15 (see page 4 of the Office Action). As

explained above, Hansen clearly fails to teach or suggest a control program of a controller such

as a ladder diagram. In Hansen, there is no controller and clearly no control program for the

controller can be present. Moreover, the supporting passage cited by the Examiner recites:

> For example, the device window 104
> illustrated in FIG. 4 includes icons
> representative of a PPP link, a vendor
> specific modular router, an ISDN-type WAN,
> an Ethernet-type LAN, a non-vendor specific
> computer subsystem, an X.25-type packet-

12

> switching WAN, and an ISDN-type WAN which
> subscribes to frame relay-mode service. At
> step 48, the network device configuration
> tool 10 loads a blank map into the network
> workspace 102. At this stage, the network
> device configuration tool 10 has completed
> loading the configuration manager GUI 100
> and is ready to execute selected commands in
> response to inputs received from the network
> administrator via the user interface 9.

The Examiner alleges that the configuration of the network device is equivalent to the display

drafting, then clearly Hansen fails to teach or suggest generating a control program. In other

words, configuring a network device cannot be equated to both the display drafting and

generating a control program. For at least this additional reason, claim 15 is clearly patentably

distinguishable (and patentable over) Hansen.

V.   Claim Rejections under 35 U.S.C. § 103

Claims 1-6, and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over

Hansen and claims 7 and 8 as being unpatentable over Hansen in view of the APA. The

Examiner's careful reconsideration is submitted to be appropriate in view of the following

comments traversing the rejection.

A.   Claims 1-6

Of the rejected claims only claim 1 and 6 are independent. Claims 1 and 6 recite features

similar to the features argued above with respect to claim 9. Since claims 1 and 6 contain

features that are similar to the features argued above with respect to claim 9, those arguments are

respectfully submitted to apply with equal force here. For at least substantially the same reasons,

therefore, it is appropriate and necessary for the Examiner to withdraw this rejection of

independent claims 1 and 6 and their dependent claims 2-5.

Moreover, independent claim 1 recites "means for setting up display drafting information for said selected device comprising a display component, a display mode and a display function" The Examiner alleges that a display mode is equivalent to a device being connected and/or unconnected, and a display function is equivalent to Hansen's teachings in col. 15, lines 32 to 51. Also, the Examiner takes Office Notice that setting up a display component of a device to different looks is well known in the computer art (see pages 4 to 5 of the Office Action). Applicant respectfully disagrees. Hansen fails to teach or suggest means for setting up a display drafting information. In fact, Hansen only teaches configuring a network device and is not related to setting up the display drafting information. Col. 15, lines 32 to 51 of Hansen are directed to configuring the device as being connected or unconnected to other devices in the network. Hansen clearly fails to teach or suggest a display function. For at least this additional reason, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 1..

Furthermore, dependent claim 4 recites "means for appending a comment to the device of said controller…and means for sharing the appended comment between said display drafting apparatus and said control program generator." The Examiner alleges that Figs. 4 and 7, and col. 9, lines 25 to 52 of Hansen teach this exempalry recitation of claim 4 (see pages 5 to 6 of the Office Action). First, col. 9, lines 25 to 52 of Hansen teach loading the configuration tool for configuring a network device. The cited passage does not teach or suggest any means for appending a comment to the device. Moreover, Hansen fails to teach or suggest sharing the appended comment between the display drafting apparatus and the control program schema generator. For at least these additional exemplary reasons, it is appropriate and necessary for the Examiner to withdraw this rejection of claim 4.

14

In addition, independent claim 6, which is directed to a display drafting system, recites "a controller." Hansen fails to even mention a controller. Clearly, Hansen which only teaches an application for facilitating the configuration of the network cannot anticipate a display drafting system that has a controller. For at least this additional reason, claim 6 is patentable over Hansen.

B.   *Claims 7 and 8*

Claims 7 and 8 stand rejected as being unpatentable over Hansen in view of the APA. The Examiner's careful reconsideration is submitted to be appropriate in view of the following comments traversing the rejection. Claims 7 and 8 depend on claim 6. It was already demonstrated that Hansen fails to teach or suggest all the requirements of independent claim 6. The APA is relied upon only for its teaching of connecting the display drafting apparatus, the display, and the controller in series. Clearly, the APA does not cure the above identified deficiencies of Hansen.

Moreover, the Examiner asserts that it would have been obvious to combine Hansen and the APA. Applicant respectfully disagrees. To begin, it is respectfully submitted that there is no motivation to combine the APA and Hansen in the manner suggested by the Examiner (see pages 7 to 8 of the Office Action). A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. *See In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000) (*citing In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)). Close adherence to this methodology is especially important in cases where the very ease with which the invention can

be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher." *Kotzab,* 55 USPQ2d at 1316 (*quoting W.L. Gore & Assocs., Inc. v. Garlock, Inc.,* 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. *In re Kotzab,* 55 USPQ2d at 1316 (*citing In re Rouffet,* 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. *Id.* However, *identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention.* *Id.* Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab,* 55 USPQ2d at 1316 (*citing In re Dance,* 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); and *In re Gordon,* 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

"Although the suggestion to combine references may flow from the nature of the problem, 'defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness.'" *Monarch Knitting Mach. Corp. v. Sulzer Morat Gmbh,* 139 F.3d 877, 880, 45 USPQ2d 1977, 1981 (Fed. Cir. 1998). "Therefore, when determining the patentability of a claimed invention which combines two known elements, the question is whether there is something in the prior art as a whole to suggest the desirability, and thus obviousness, of making the combination." *In re Beattie,* 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992).

16

Although a reference need not expressly teach that the disclosure contained therein

should be combined with another, the showing of combinability, in whatever form, must

nevertheless be "clear and particular." *Winner International Royalty Corporation v. Ching-Rong*

Wang, 202 F.3d 1348, 53 USPQ2d 1580, 1586-87 (Fed. Cir. 2000) (citations omitted).

The APA is directed to a display for indicating the operated condition of a controller

which coordinates and controls the operation of a controlled system such as the industrial

equipment, the production line or the chemical plant. The controller holds the signal and data of

the controlled system and classifies them into an input signal, an output signal, a count value, a

timer value and numerical data. These signals and data are examples of the devices. They are

stored in memory and are controlled by a control program, which specifies the operation of the

controlled system. To inform the device values of the controller to the operator on a production

line, a display is used to display the device data. These display screens are drafted by designers.

In short, the APA is directed to a drafting apparatus, which indicates the operating conditions of

the devices of the controller and a control program that specifies the control operations of the

controlled system.

Hansen, on the other hand, addresses completely unrelated problem of facilitating

configuration of the network devices for an administrator. Hansen teaches a program for

selecting a network device and configuring it. In short, Hansen teaches configuring a network,

whereas the APA deals with a display for indicating the operation condition of a controller

system. The two references are unrelated and one of ordinary skill in the art confronted with a

problem of memorizing a device when drafting the display information for these devices and a

control program for operation of these devices would never have turned to a reference like

Hansen. Hansen's application for network configuration is from a different field of endeavor, and it addresses a completely different problem (configuring a network device such as a display, a routers, a workstations, and the like).

Hansen has nothing to do with drafting display information for the device or a control program for the selected device. In Hansen, the network devices are configured and it is facilitated via display of the configuration map. APA, however, deals with creating the display information for these devices. In the APA, it is customary to first draft the display information and then select the device to which this information is to be applied (*e.g.*, Fig. 25).

In short, it is respectfully submitted that one of ordinary skill in the art confronted with the problem of memorizing the devices for which the display information and the control program is drafted would never have turned to a reference like Hansen, which deals with configuring a network and has nothing to do with the problem of memorizing the devices or with creating the display information for the device of a controller. One of ordinary skill in the art could not have effectively combined the two radically different systems at all, let alone in the manner thought by the Examiner to be obvious. In short, there was no motivation to combine the references in the manner indicated by the Examiner.

Clearly, APA does not compensate for the above-identified deficiencies of Hansen. Together, the combined teachings of Hansen and the APA would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claim 6. Since claims 7 and 8 are dependent upon claim 6, they are patentable at least by virtue of their dependency.

C.   *Claim 11*

Finally, claim 11 is rejected as being unpatentable over Hansen. The Examiner's careful reconsideration is submitted to be appropriate in view of the following comments traversing the rejection. Claim 11 depends on claim 9. It was already demonstrated that Hansen fails to teach or suggest all the requirements of independent claim 9. Therefore, claim 11 is patentable at least by virtue of its dependency on claim 9.

VI.   Conclusion and request for telephone interview

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.
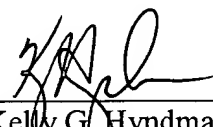
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CUSTOMER NUMBER

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19